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Community Relations Plan
for the
Potomac Yard Site
Alexandria, Arlington County, Virginia

Prepared for
U.S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

On
July 17, 1996

Under
ESS Region III

Work Assignment No.
ESS-062

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Section 1
Overview of the Community Relations Plan

EPA developed this Community Relations Plan to encourage community involvement and two-way communication between the Site community and EPA during the Site cleanup*. EPA is committed to acknowledging and addressing the Site-related concerns of local community members including residents, public officials, media, and other interested parties. Because awareness of the contamination at the Potomac Yard Site (Site) is not high, community involvement in the Site has been moderate. Recently though, activities at the Potomac Yard Site and ongoing concern about its future use have heightened community interest in EPA's work in the area.

EPA will use this Community Relations Plan as a guide to conduct community relations activities as part of the Superfund process at the Site. This Community Relations Plan describes: the Site and its history; past community involvement; current community concerns; and the steps EPA will take to address these concerns. EPA's major goal is to keep community members informed about and involved in the Site cleanup process. EPA prepared this Community Relations Plan from many information sources, including EPA Site files, public meetings, and input from local residents and public officials. The EPA Region III office will oversee the implementation of all activities outlined in this Plan.

This Community Relations Plan is divided into six sections, plus appendices. Section 1 is an *Overview of the Community Relations Plan.* Section 2, *EPA Background,* provides an overview of Superfund and relevant EPA sections, divisions, branches, and offices, and the role of the Virginia Department of Environmental Quality (VADEQ). Section 3, *Site Description and History,* gives a brief summary of the Site and its history. Section 4, *Community Background,* presents a profile of the community surrounding the Site, a history of community relations at the Site, Site-related concerns and issues raised by community members, and a listing of the community's non-Site environmental concerns. Section 5, *Goals of the Community Relations Plan,* describes the community relations goals that EPA will achieve by involving local residents, public officials, and local news media in Site activities. Section 6, *Community Relations Activities,* describes the activities EPA will conduct to achieve its community relations goals at the Site.

*All words highlighted in **bold** are defined in the Glossary of Technical Terms (Appendix D).

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Section 2
EPA Background

2.1 Superfund

Superfund is the Federal government's program to clean up uncontrolled or abandoned hazardous waste sites. Superfund is guided by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Superfund's laws, officially known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), were passed by Congress in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA). Superfund gives EPA the authority to stop ongoing releases or prevent potential releases of hazardous substances; enables EPA to make the parties responsible for contaminating a site pay for its cleanup; and provides funding for the cleanup when money from responsible parties is not available.

2.2 Superfund Accelerated Cleanup Model

The Potomac Yard Site is being addressed under a streamlined Superfund process known as the Superfund Accelerated Cleanup Model (SACM). The SACM was established to make site cleanups more timely and efficient. The SACM combines early actions, such as removing hazardous wastes or contaminated materials, with ongoing studies so that immediate threats to public health or the environment are addressed while long-term cleanups are being planned. Under the SACM, the Potomac Yard Site is being addressed as a long-term, non-time critical removal action. The SACM process at the Potomac Yard Site involves the activities described below.

Early Action Response Plan

After receiving initial site information, EPA decides whether action at the site is emergency-time critical or non-time critical. An emergency-time critical removal action is required when prompt action is needed to prevent an immediate risk to human health or the environment. Non-time

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critical removal actions are required when less urgent actions are needed to stabilize the site and/or eliminate contamination.

Extent of Contamination Study (ECS)

If EPA determines that proposed actions at a site are non-time critical, as at the Potomac Yard Site, EPA performs an **Extent of Contamination Study (ECS)**. The ECS determines what contaminants are present at the site and in what amount. The ECS also describes the site and its history, outlines previous investigations and clean-up actions, describes the data collection strategies used by EPA, and summarizes data results.

Baseline Human Health and Ecological Risk Assessment (BHERA)

The **Baseline Human Health and Ecological Risk Assessment (BHERA)** evaluates the risks to human health and the environment associated with potential exposures to the contaminants at the site. The BHERA outlines the potential routes of exposure to contaminants and determines the likelihood that human health and the environment could be adversely affected by contamination.

Engineering Evaluation/Cost Analysis (EE/CA)

The **Engineering Evaluation/Cost Analysis (EE/CA)** analyzes clean-up alternatives for the site. The EE/CA provides a framework for evaluating and selecting alternative cleanup technologies and identifies which cleanup alternatives would work best with the site's specific conditions, contaminants, and risks posed.

Action Memorandum

The **Action Memorandum** summarizes public comment on the EE/CA received during the public comment period and identifies the removal action EPA will conduct to address contamination at the site.

2.3 Relevant EPA Groups

Headquartered in Washington, D.C., EPA has 10 regional offices, each of which have community relations and technical staff involved in Superfund site cleanups. EPA Region III encompasses

Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and Washington, D.C. The EPA Region III office, located in Philadelphia, Pennsylvania, houses several divisions, branches, and sections that work with other EPA regional offices when necessary. The EPA branches most involved with the Potomac Yard Site are described below.

Community Involvement Branch (Region III)

This branch oversees communication between EPA and all residents, public officials, media representatives, and community groups associated with hazardous waste sites. The Community Involvement Branch is responsible for the planning, coordination, and implementation of activities designed to enhance communication and community involvement for each site. Each site is assigned a Community Involvement Coordinator who works closely with EPA technical staff to keep the local community informed and involved during cleanup work. (The Community Involvement Coordinator for the Potomac Yard Site is Lisa Brown. See Appendix A, page 6, for her address and telephone number.)

Superfund Removal Branch (Region III)

EPA's Superfund Removal Branch manages short-term and long-term removal actions and emergency removal responses. These actions include responses to accidental releases of hazardous substances, as well as short-term work at Sites on EPA's National Priorities List and long-term non-time critical removal actions under the SACM. Removal actions are supervised by EPA On-Scene Coordinators (OSCs). (The On-Scene Coordinator for the Potomac Yard Site is Jeffrey Dodd. See Appendix A, page 6, for his address and telephone number.)

2.3 State, County, & City Role

Virginia Department of Environmental Quality

The Virginia Department of Environmental Quality (VADEQ) is the support agency for EPA-led studies and cleanups at federal Superfund sites in Virginia. (See Appendix A for the name, address, and telephone number of the VADEQ contact person for the Potomac Yard Site.) VADEQ reviews and comments on Site workplans and studies, participates in community relations activities, and provides technical assistance to EPA.

Arlington County, Virginia

Arlington County officials work with EPA and the City of Alexandria at the Site to oversee all cleanup work. County officials attend meetings with EPA and other stakeholders in the Site cleanup and review and provide comments on EPA documents. (See Appendix A for a listing of relevant Arlington County officials.)

City of Alexandria, Virginia

The City of Alexandria acts as a liaison between EPA and other stakeholders in the Site cleanup. Future plans to develop the Site property make the City of Alexandria a direct stakeholder in the cleanup. The City of Alexandria maintains a regular presence at the Potomac Yard Site and provides local assistance and guidance to EPA when needed. Alexandria officials also review and provide comments on EPA documents and Site-related material. (See Appendix A for a listing of relevant Alexandria officials.)

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Section 3
Site Description and History

3.1 Site Description

The Potomac Yard Site occupies approximately 340 acres in Alexandria, Arlington County,Virginia (See Figure 1) and is bordered by 27th Street to the north, Braddock Road to the south, U.S. Route 1 to the west, and the George Washington Memorial Parkway to the east. Located adjacent to the Site are several residential communities which include single family homes, condominiums, and townhomes. Daingerfield Island, a mixed-use recreational facility, and the Potomac River lie to the east of the Site. Four Mile Run, a perennial stream which flows east to the Potomac River, divides the northern portion of the Site.

3.2 Site History

The Potomac Yard Site served as a railroad switching and maintenance yard for over 100 years. Railroad operations began in the mid-1800s with development of the Site into a major rail yard in the early 1900s. By 1937, the rail yard had expanded to approximately its maximum extent. Potomac Yard serviced several different railroad lines with locomotive classification, switching, maintenance, servicing, and refueling conducted at the Site.

In 1989, a decommissioning process of the Potomac Yard Site began and continued through 1993. During the decommissioning process, most of the switching track, locomotive maintenance facilities, and other rail yard buildings were removed. Currently, the Site is owned by the Richmond Fredericksburg and Potomac (RF&P) Railroad Company, which is owned by the Virginia Retirement System.

In 1987, EPA identified the Potomac Yard as a potential threat to human health and the environment, placed it on the EPA CERCLIS database, and targeted the Site for further investigation. As a result, the Virginia Department of Waste Management (VDWM) conducted a Preliminary Assessment (PA) and Site Investigation (SI) in 1988 and 1989 respectively. The SI

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identified several metals present in soils at the Site above health-based levels. In addition, volatile organic compounds and polychlorinated biphenyls (PCBs) were found in the soil.

In 1990, RF&P Railroad Company, the Site owner and potentially responsible party (PRP) conducted an Environmental Assessment on the northern portion of the Site to evaluate the property for future development. The Assessment evaluated approximately 50 of the northernmost acres of the Site to determine if soil, sediment, surface water, and ground water contamination exists. Approximately 144 surface water, subsurface soil, sediment, and groundwater samples from eight monitoring wells were collected. The Assessment also revealed that several metals were present in the samples as well as petroleum hydrocarbons in one soil and groundwater sample.

In 1991, RF&P Railroad Company conducted another Environmental Assessment of the central operations center of the Site. This Assessment revealed that approximately seven feet of diesel fuel was observed in ground water monitoring wells. The release was assumed to have occurred over many years due to over-filling of locomotives and leaks in the fuel storage and distribution system. A number of recovery wells were installed in this area of the Site and two product skimmer pumps were installed in May 1994 to continue collecting the fuel oil. The removal of fuel oil is still being conducted at the Site by RF&P Railroad Company under the oversight and monitoring of the Virginia Department of Environmental Quality.

In July 1992, RF&P Railroad Company collected 305 soil, 41 groundwater, 26 sediment, and 26 surface water samples in the A-1 area of the Site. The A-1 area includes the area of the Site between South Glebe Road to the north and the Monroe Street bridge to the south. As a result, EPA then negotiated with RF&P Railroad Company to develop a work plan and study the contamination on-Site to determine if clean-up actions are necessary. On September 22, 1992, EPA and RF&P Railroad Company entered into an Administrative Order of Consent to investigate the nature and extent of contamination on-Site and evaluate various methods to clean it up.

Between June 1993 and and March 1995, RF&P Railroad Company collected various soil, sediment, and surface water samples and submitted a draft Extent of Contamination Study (ECS) as well as a Risk Assessment to EPA for the A-1 area and all other areas outside of the A-1 area. EPA and other support agencies reviewed and submitted comments on this report in May 1995. The final ECS was approved in September 1995.

Based upon results of the ECS and the Baseline Human Health and Ecological Risk Assessment (BHERA), EPA determined that further removal actions are appropriate and that an Engineering Evaluation/Cost Analysis (EE/CA) will be completed. The EE/CA for the Potomac Yard Site is being developed by RF&P Railroad Company pursuant to a Consent Order between RF&P and EPA. EPA granted approval to RF&P Railroad Company on October 6, 1995 to begin the EE/CA. The EE/CA includes evaluating, proposing, and reviewing alternatives to prevent the release of contaminants from the Site and developing an off-Site ecological risk assessment to address the effect of contamination on off-Site receptors. Once the EE/CA is completed and approved, EPA will release the EE/CA for public review and comment before selecting a final cleanup action.

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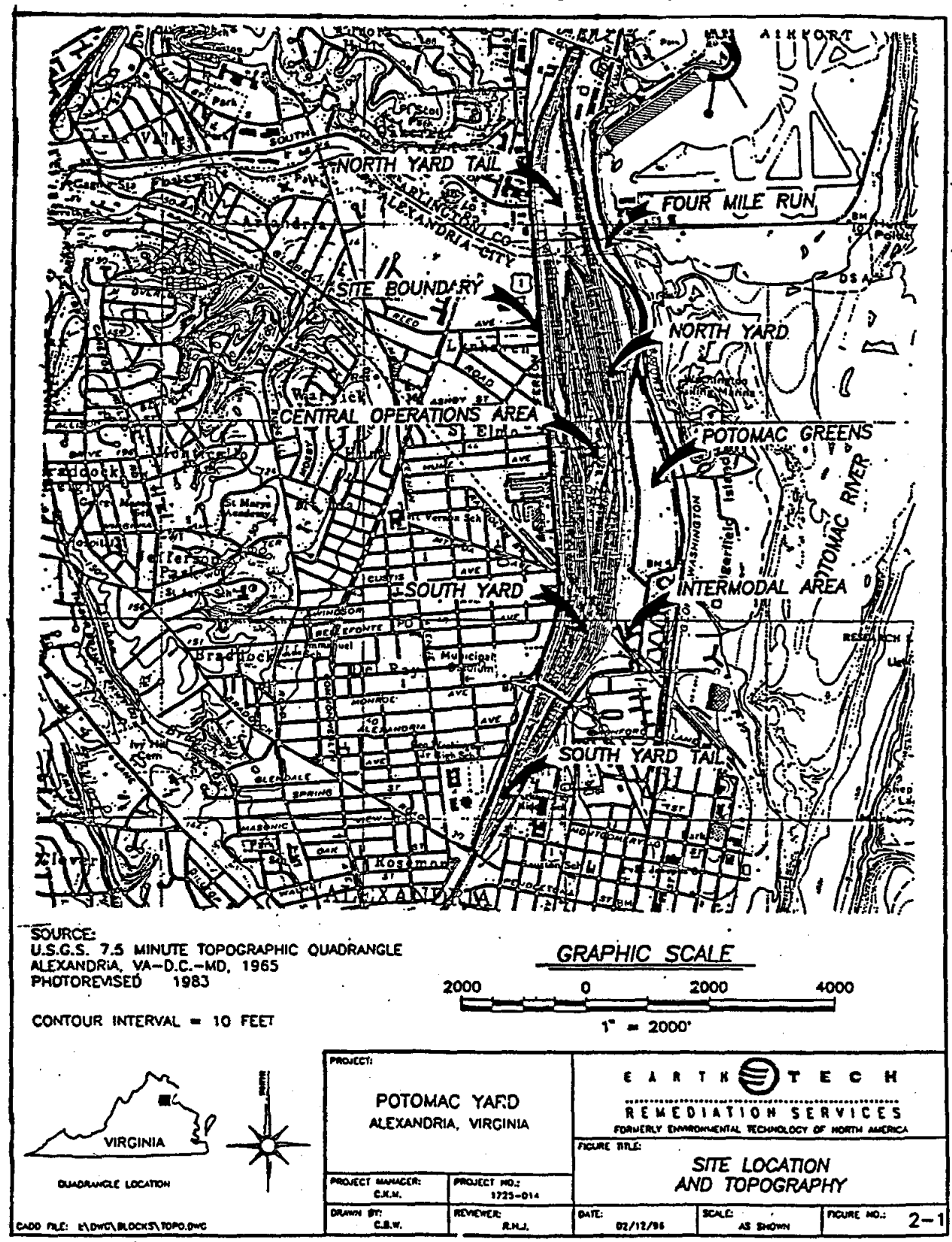
Figure 1
Site Location and Layout Map



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Section 4
Community Background

4.1 Community Profile

The City of Alexandria is a historic community that contains the landmarks of the nation when it was young. Alexandria is identified as the city of neighborhoods and a "hotbed of civic activism" that thrives on the diversity of its community members. Alexandria is just 15.75 square miles in size, however, the residential population (116,400) has experienced a slow, but steady growth over the last five years. Alexandria is located at the head of deep-water navigation on the Potomac River and is located just a few miles from Washington, DC. Alexandria has a state-of-the-art rail transportation system, as well as easy access to major thruways such as Interstate 95, the Capital Beltway, and the George Washington Memorial Parkway. The city is governed by a mayor, and six city council members who are elected at-large for three-year terms. Alexandria maintains full-time fire and police departments and is serviced by public water and sewer facilities. Alexandria's major employers include the Department of Defense, Alexandria Hospital, the Washington Metropolitan Transit Authority, and the Pentagon Federal Credit Union. Alexandria houses two newspapers and receives information from other media outlets in the Arlington and Washington metropolitan area.

The immediate Site community is located adjacent to the Site in several residential neighborhoods, townhomes, and condominium complexes such as Del Ray, Rosemont, Auburn Village, Lynhaven, Mt. Jefferson, and Warwick Village. Many in the Site community belong to one of the various civic associations which regularly meet and discuss community events and ways to improve the local neighborhoods. Crystal City, a high-rise retail and commercial area, borders the Site to the north. Arlington County, a mixed residential and commercial area, also borders the Site.

4.2 Community Involvement and Community Concerns

Although community awareness of the Potomac Yard Site is high, community involvement in EPA's work at the Site has been limited. This can be attributed to the extensive investigations and

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studies that have been undertaken at the Site to determine the type of contamination present and the best methods to clean it up. However, EPA has kept local city officials informed of ongoing activity at the Site, responded to requests for information from local community members and civic groups, and spoken with various community members about their Site-related concerns. EPA also established three local information repositories which contain technical documents, updated fact sheets, general information on the Superfund process, and other Site-related material generated during EPA's work at the Site. (See Appendix C for the addresses of the information repositories.)

Listed below are some of the concerns raised by local community members during conversations with the EPA Community Involvement Coordinator and the EPA On-Scene Coordinator.

- **Impact of the Site on the Potomac River**
  Community members expressed concern that contamination from the Potomac Yard Site could adversely affect the Potomac River and the aquatic life it supports.

- **Interim Site Usage and Future Site Development**
  Many in the community are concerned about the current use of the Potomac Yard property and how the property can be returned to beneficial use after the cleanup.

- **Risks to Wildlife from Current Site Surface Conditions**
  Local residents are concerned about whether current surface conditions at the Site are hazardous to animals and other wildlife who wander onto the Site.

- **Contamination Cleanup vs. Contamination Containment**
  Community members expressed concern that an ongoing contamination cleanup would be more detrimental to their communities than contamination containment.

- **Highway Development and Increased Traffic Patterns**
  Local residents near the Site are concerned that potential highway development near the Site will increase the traffic flow around and through their communities causing new traffic problems and congestion.

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- **Economic Development and Alexandria's Growth**
  Many community members are concerned that the Site area will be used to promote economic development and growth in Alexandria and they are concerned about the effects of that growth on their communities.

- **Other Concerns Non-Related to the Site**
  Several community members are concerned about groundwater contamination in other nearby communities. Residents are generally concerned about the safety and quality of the drinking water supply in the Blue Plains community.

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Section 5
Goals of the Community Relations Plan

EPA's Community Relations Plan for the Potomac Yard Site is guided by four main objectives. These objectives, listed below, involve the cooperative efforts of the EPA Community Involvement Coordinator and On-Scene Coordinator for the Site, as well as other EPA staff.

1. Provide community members with useful information about the Site and the Superfund process.

EPA will use fact sheets, newsletters, public notices, public meetings, news releases, and other means to explain the Site evaluation and cleanup process and describe how Site Removal activities fit into the general Superfund process. EPA will explain complex Site activities in general terms so that community members understand the cleanup process.

2. Provide timely, Site-specific updates to the community.

EPA will regularly update local residents, city officials, community and civic groups, and other interested parties on the progress of the Site cleanup. EPA will make phone calls, hold public meetings, and distribute written material to keep community members updated on Site activities. In addition, EPA will make Site-related documents available to the public.

3. Enlist and encourage the participation of community members and civic associations in EPA's activities and provide opportunities for community input.

EPA will encourage the Site community to take an active role in the evaluation and cleanup process through community outreach activities. Such activities may include a Superfund or EE/CA workshop, availability sessions, Site tours, and community interviews. EPA will also listen to and address Site-related comments and questions voiced by community members and civic associations.

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4. Enhance communication between EPA, city officials, and the media.

EPA will provide Alexandria City and Arlington County officials with information about Site activities and will invite and address questions from them. EPA will also distribute and thoroughly explain Site-information to the local media so that they can convey accurate information to community members about the Site cleanup.

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Section 6
Community Relations Activities

Described below are 15 community relations activities for the Potomac Yard Site designed to achieve the goals summarized in Section 5. Please note that the sequential numbers which accompany the 15 community relations activities are for reference only, and do not necessarily indicate their relative importance. The anticipated time frame for these activities is shown in the table on page 21.

1. Notify the surrounding Site communities of upcoming Site activities on a regular basis.

Objective: To minimize any concerns or disruptions to the community or their normal schedule. Regular updates on Site activities will enhance public participation in the Site cleanup and enable the community to provide informed input to EPA.

Method: EPA will provide printed material, make telephone calls, and hold availability sessions to focus on current and upcoming Site cleanup work. EPA will also use these methods to announce the release of important Site documents, other milestones, and to publicize the time, place, and purpose of public meetings.

2. Notify local media of upcoming Site activities on a regular basis.

Objective: To ensure the distribution of accurate and consistent information about Site activities. EPA will issue press releases, contact media representatives, and hold news briefings to provide the media with timely and accurate information. Communication between EPA and VADEQ is also important to ensure that EPA's updates are coordinated with relevant VADEQ activities.

Method: News releases, telephone calls, and briefings will: detail the current and upcoming Site activities; announce the release of key documents and other milestones; and publicize the time, place, and purpose of public meetings.

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3. Designate an EPA Community Involvement Coordinator to handle Site inquiries.

Objective: To ensure prompt, accurate, and consistent responses and information about the Site. If EPA's Community Involvement Coordinator is unable to provide adequate information, inquiries will be directed to the proper EPA contact.

Method: Lisa Brown is the EPA Community Involvement Coordinator assigned to the Site. She will work closely with Jeffrey Dodd, EPA's On-Scene Coordinator for the Site. (See Appendix A, page 6, for their addresses and phone numbers.)

4. Respond promptly and accurately to inquiries from local residents, public officials, community groups, and the media.

Objective: To maintain two-way communication between EPA and the Site community. Prompt, accurate responses will strengthen community involvement and enhance cooperation between EPA and other parties involved in the Site cleanup. Prompt responses to inquiries from local residents, community groups, the media, and local officials will increase public awareness and understanding of Site activities.

Method: Personal responses, meetings, and printed material will provide the basis for prompt responses from EPA to inquiries from the community. EPA's Community Involvement Coordinator will direct all inquiries to the proper contacts and ensure that a response is returned to the community in a timely manner.

5. Prepare and distribute Site updates, fact sheets, and technical summaries.

Objective: To provide an easy-to-read update on Site activities. Site updates and fact sheets generally summarize technical work and are mailed to residents, community groups, local and state officials, and other interested parties.

Method: Fact sheets will be mailed to all parties on the Site mailing list and copies will also be placed in various locations in the Site community. Fact sheets may include: information about past, current, and upcoming Site activities; question and answer sections focusing on

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community concerns; overviews of cleanup technologies; Site maps; listings of EPA and other relevant contact persons; and tear-off forms so that residents can add their names to the EPA Site mailing list. Copies of fact sheets will also be available at the local EPA information repositories for the Site. (See Appendix F for a copy of the fact sheet produced by EPA in November 1995.)

6. Maintain contact with the local community and civic groups and the City of Alexandria and Arlington County.

Objective: To maintain good communication between the Site communities, EPA, Arlington County, and the City of Alexandria, and to help keep other residents informed of Site activities. (See Appendix A for the names, addresses, and telephone numbers of relevant City of Alexandria, Arlington County, and community and civic group contact persons.)

Method: EPA will inform the community and civic groups and relevant officials from the City of Alexandria and Arlington County of Site developments and upcoming community involvement activities.

7. Maintain and update the local information repositories.

Objective: To provide a reference point where the public can review the latest information on the Site cleanup. EPA will update this collection of Site-specific documents on the Potomac Yard Site and the Superfund process so that citizens can follow the progress of the Site cleanup and provide informed comment.

Method: As Site documents are released, they will be placed into each information repository. These repositories serve as a reference collection of Site information. Each information repository contains the Administrative Record file, which includes the investigation and study reports and other documents used by EPA to select clean-up actions. The repository also includes the Community Relations Plan, information about the Technical Assistance Grant program, and other information about the Site and the general Superfund process. EPA has established three local information repositories. (See Appendix C for each repository's address, telephone number, and business hours.)

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8. Provide Technical Assistance Grant information.

Objective: To allow the Site community a chance to review the work being conducted at the Site. EPA will provide information about the Technical Assistance Grant program and review grant applications from qualified groups.

Method: EPA will make available the application for a Technical Assistance Grant to any community member who requests it. (See Appendix E for information on how to obtain an application and reference material.)

9. Release an Engineering Evaluation/Cost Analysis (EE/CA) and hold a public comment period on it.

Objective: To identify various clean-up options and request public input on EPA's recommended course of action. As required, EPA will review all comments received during any public comment period before making its final selection of a cleanup alternative.

Method: EPA's public comment period on the EE/CA lasts for a minimum of 30 days, and can be extended. EPA will announce the public comment period prior to releasing the EE/CA. (See public notices on following page.)

10. Publish public notices.

Objective: To inform the community of key Site developments, public meetings, and the release of Site documents.

Method: Notices will appear in the local news section of the *Alexandria Journal* and may be published in other community publications as well. Notices include relevant dates, times, and locations of meetings or activities, as well as the name, address, and phone number of the primary EPA contact person. Public notices regarding Site-specific documents, such as the EE/CA, will briefly summarize the document.

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11. Conduct public meetings or information sessions.

Objective: To update the community on Site developments and address any community questions and comments.

Method: Public meetings will be held in the evening at a central location in the Site community so that all interested parties will be able to attend. Information sessions are usually held all day and can be attended at any time. (See Appendix B for possible public meeting locations.) The EPA Community Involvement Coordinator, the EPA On-Scene Coordinator, and other EPA staff will be present at these events. EPA will hold meetings or information sessions as needed. If appropriate, EPA will investigate the possibility of videotaping public meetings and demonstrations for display on the local cable access channel.

12. Prepare a Responsiveness Summary.

Objective: To document and summarize any community input received by EPA during an EPA public comment period.

Method: EPA will prepare a Responsiveness Summary as a section of the Action Memorandum. The Responsiveness Summary summarizes community comments and questions received during any EPA public comment period, as well as EPA's responses.

13. Conduct informal meetings and workshops.

Objective: To enable EPA to explain the Superfund process, describe cleanup technologies, share information on Site-related issues, and request input from the community.

Method: EPA will conduct informal meetings and workshops on an as-needed basis and as requested by the community. They will take place at a convenient location within the community and will involve the participation of the EPA Community Involvement Coordinator, the EPA On-Scene Coordinator, as well as other EPA staff and other individuals as needed.

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14. Maintain and update Site mailing lists.

Objective: To use in mailing Site fact sheets, providing telephone updates, and conducting other community involvement activities.

Method: EPA maintains an up-to-date listing of federal, state, and local officials; local media; community groups; and other interested parties. EPA also maintains a separate and private list of residents, obtained from local tax records, public meeting sign-in sheets and community interviews. To protect the privacy of these persons, EPA will not release the list to the press or general public. (See Appendix A for the names, addresses, and telephone numbers of federal, state, and local officials; local media; community groups; and other interested parties.) If you would like to be added to the Site's mailing list, please contact the Community Involvement Coordinator, Lisa Brown (see Appendix A, page 6).

15. Revise the Community Relations Plan.

Objective: To identify and address community needs, issues, or concerns regarding the Site or the cleanup remedy that are not currently addressed in this Community Relations Plan.

Method: EPA will revise the Community Relations Plan as community concern warrants or at least every two years in lieu of an Action Memorandum at the Site. The Revised Community Relations Plan will update the information presented in the previous version of the Community Relations Plan.

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Table 1
Community Relations Activities and Timing

Activity	Timing
1. Notify residents of upcoming Site activities.	As Site activity warrants.
2. Notify local media of upcoming Site activities.	As Site activity warrants.
3. Designate an EPA primary contact person.	Person has been designated.
4. Respond promptly and accurately to inquiries.	As needed.
5. Distribute Site updates and fact sheets.	As the Site cleanup progresses.
6. Maintain contact with the local community and civic groups.	As Site activity warrants.
7. Maintain and update each local Information Repository.	As new Site documents are released.
8. Provide Technical Assistance Grant information.	As requested.
9. Release an EE/CA and provide a public comment period on this Analysis.	A minimum of 30-days.
10. Publish Public Notices (newspaper ads).	At milestones, such as the EE/CA, Action Memorandum, and for other reasons as needed.
11. Conduct public meetings.	After releasing the EE/CA, before beginning clean-up work, and for other reasons as needed.
12. Prepare a Responsiveness Summary.	After a public comment period.
13. Conduct informal meetings and workshops.	As needed, and based on community interest.
14. Maintain and update Site mailing lists.	Lists have been established; update as needed.
15. Revise the Community Relations Plan.	As needed.

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APPENDIX A
Interested Party and Contact List

Interested Party and Contact List

A. Federal Elected Officials

Senator John W. Warner
225 Russell Office Building
Washington, DC 20510 (202) 224-2023
(Anne Loomis - Legislative Assistant)

600 East Main Street
Richmond, VA 23219 (804) 771-2579

Senator Charles S. Robb
154 Russell Office Building
Washington, DC 20510 (202) 224-4024
(Nicole Venable - Legislative Assistant)

1011 East Main Street
Richmond, VA 23219 (804) 771-2221

Representative James P. Moran
430 Cannon House Office Building
Washington, DC 20515 (202) 225-4376
(Chris King - Legislative Assistant)

5115 Franconia Road, Suite B
Alexandria, VA 22310 (703) 971-4700

B. State Elected Officials

Governor George Allen
Office of the Governor
P.O. Box 1475
Richmond, VA 23212 (804) 786-2211

Donald S. Beyer, Jr.
Lieutenant Governor
101 North Eighth Street
Supreme Court Building, Room 104
Richmond, VA 23219 (804) 786-2078

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James S. Gilmore
Attorney General
900 East Main Street
Richmond, VA 23219 (804) 786-2071

Helen Fahey
United States Attorney
2100 Jamison Avenue
Alexandria, VA 22314 (703) 299-3700

Delegate Brian Moran
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Richmond, VA 23203 (804) 786-7253

Delegate Marian Van Landingham
General Assembly Building
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Richmond, VA 23203 (804) 786-6718

301 King Street
Alexandria, VA 22314 (703) 549-2511

Senator Patricia S. Ticer
General Assembly Building
P.O. Box 396
Richmond, VA 23219 (804) 786-6074

301 King Street
Alexandria, VA 22314 (703) 549-5770

C. Local Officials

Kerry Donley, Mayor
City of Alexandria
301 King Street, Room 2300
Alexandria, VA 22314 (703) 838-4500

Redella Pepper, Vice-Mayor
City of Alexandria
301 King Street, Room 2300
Alexandria, VA 22314 (703) 838-4500

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William C. Cleveland, Councilman
City of Alexandria
301 King Street, Room 2300
Alexandria, VA 22314 (703) 838-4500

William D. Euille, Councilman
City of Alexandria
301 King Street, Room 2300
Alexandria, VA 22314 (703) 838-2680

Lonnie C. Rich, Councilman
City of Alexandria
301 King Street, Room 2300
Alexandria, VA 22314 (703) 836-7441

Lois Walker, Councilwoman
City of Alexandria
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Alexandria, VA 22314 (703) 549-3360

Vola Lawson, City Manager
City of Alexandria
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Alexandria, VA 22314 (703) 838-4300

Beverly Steele, Deputy City Manager
City of Alexandria
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Alexandria, VA 22314 (703) 838-4300

Michele R. Evans, Assistant City Manager
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J. Thomas Brannan, Assistant City Manager
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Joshua Lipsman, MD, Health Director
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517 North Saint Asaph Street
Alexandria, VA 22314 (703) 838-4880

Robert D. Pritchett, Environmental Health Director
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517 North Saint Asaph Street
Alexandria, VA 22314 (703) 838-4880

William J. Skrabak, Manager
Office of Environmental Quality
517 North Saint Asaph Street
Alexandria, VA 22314 (703) 838-4850

Thomas F. O'Kane, Director
Transportation and Environmental Services
301 King Street, Room 4300
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Environmental Services
2100 Clarendon Boulevard
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R.S. Kem, Director
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2100 Clarendon Boulevard
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AR108434

D. EPA Officials

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841 Chestnut Building
Philadelphia, PA 19107

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11th & Chapline Streets
Wheeling, WV 26003

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E. State Agencies

Pat McMurray
Virginia Department of Environmental Quality
629 East Main Street
Richmond, VA 23219

(804) 698-4186

Cynthia Sale
Virginia Department of Environmental Quality
1549 Old Bridge Road
Suite 108
Woodbridge, VA 22192

(703) 490-8922

F. Media

Newspapers/Publications

Alexandria Journal
Scott Lawson
2720 Prosperity Avenue
Fairfax, VA 22034

(703) 846-8428
(703) 846-8396 FAX

AR108435

Alexandria Gazette Packet/Mt. Vernon Gazette
Crystal Waters
1700 Diagonal Road, Suite 410
Alexandria, VA 22314

(703) 549-0004
(703) 548-0390 FAX

The Washington Post
Bob Rolls
1150 15th Street NW
Washington, DC 20510

(800) 765-7678

Radio Stations

WBZS-AM (co-owned with WJZW-FM)
Steve Chaconas, News Director
510 King Street
Suite 315
Alexandria, VA 22314

(703) 683-3000
(202) 289-7730
(703) 549-3960 FAX

WAVA-FM
Richard Lee, News Director
1901 North Moore Street
Suite 200
Arlington, VA 22208

(703) 807-2266
(703) 807-2248 FAX

WETA-FM
Dan Gawthrop, PSA Director
P.O. Box 2626
Washington, DC 20013

(703) 998-2790
(703) 824-7288 FAX

Television Stations

WJLA-TV (ABC)
Gary Wordlaw, News Director
3007 Tilden Street NW
Washington, DC 20008

(202) 364-7777
(202) 364-2481 FAX

AR108436

WUSA-TV (CBS)
Robert Mennie, News Director
4100 Wisconsin Avenue NW
Washington, DC 20016

(202) 895-5999
(202) 966-7948 FAX

WRC-TV (NBC)
Richard Reingold, News Director
4001 Nebraska Avenue NW
Washington, DC 20016

(202) 885-4000
(202) 885-5022 FAX

G. Other Interested Parties

Michael Brown
Del Ray Citizen's Association
P.O. Box 2233
Alexandria, VA 22301

(703) 684-8164

Jim McCarthy
Auburn Village Condominium Association
24-A Auburn Court
Alexandria, VA 22305

(703) 739-0593

Ruby Tucker
Lynhaven Civic Association
254 Lynhaven Drive
Alexandria, VA 22305

(703) 549-7754

Glenda Davis
Hume Springs Citizen Association
3732 Edison Street
Alexandria, VA 22305

(703) 548-8225

Duane Shields
Mt. Jefferson Civic Association
324 East Clifford Avenue
Alexandria, VA 22305

(703) 683-0180

Elsie Thomas
Sunnyside Neighborhood Association
3843 Elbert Avenue
Alexandria, VA 22305

(703) 836-4653

AR108437

Duane Anderson
Warwick Village Citizen's Association
P.O. Box 5003
Alexandria, VA 22305 (703) 836-1455

Collette Capara
Rosemont Citizen's Association
12 East Maple Street
Alexandria, VA 22301 (703) 739-0548

Dan Sealy
National Park Service
George Washington Memorial Parkway
c/o Turkey Run Park
McLean, VA 22101 (703) 285-2600

George O'Reilly
BCI/Protocol
5160 Heatherstone Drive, Suite 210
Chantilly, VA 22021 (703) 631-8402

Ron Carrol
Enterprise School
1629 Bueller Road
Vienna, VA 22182-2232 (703) 281-2232

Martin R. Kurtovich
U.S. Department of Energy
EM-20 FORS
Washington, DC 20585 (202) 586-5213

Alexandria Convention and Visitor's Bureau
221 King Street
Alexandria, VA 22314 (703) 838-4200

AR108438

APPENDIX B
Public Meeting Location and Stenographic Information

Public Meeting Location

George Washington Middle School
1005 Mt. Vernon Avenue
Alexandria, VA 22301

Contacts:
Mr. Joseph Powlus, School Principal
(703) 706-4500

Ms. Georgia Brown
Alexandria School Board
200 North Beauregard Street
Alexandria, VA 22311
(703) 824-6688

Resources:
Auditorium, classrooms, tables, chairs, air conditioning, podium, and restrooms are available. The building is accessible to the handicapped.

AR108440

Stenographic Information

AA Beta Court Reporting
910 17th Street NW
Suite 200
Washington, DC 20006

Contact:
Natasha
(703) 684-2382

Court Reporting Services Inc.
201 North Fairfax Street
Suite 21
Alexandria, VA 22314

Contact:
John or Jay
(703) 548-3334

American Reporters
7611 Springfield Hill Drive
Springfield, VA 22153

Contact:
Sandra
(703) 644-7636

AR108441

APPENDIX C
Information Repositories

AR108442

Information Repositories

- Alexandria Public Library
  Burke Branch
  4701 Seminary Road
  Alexandria, VA

  Contact:
  (703) 370-6050

  Hours:
  Monday to Thursday, 9:00 a.m. to 9:00 p.m.
  Friday, 9:00 a.m. to 6:00 p.m.
  Saturday, 9:00 a.m. to 5:00 p.m.

- Alexandria Public Library
  Barrett Branch
  717 Queen Street
  Alexandria, VA

  Contact:
  (703) 838-4555

  Hours:
  Monday to Thursday, 9:00 a.m. to 9:00 p.m.
  Friday, 9:00 a.m. to 6:00 p.m.
  Saturday, 9:00 a.m. to 5:00 p.m.
  Sunday, 1:00 p.m. to 5:00 p.m.

- Arlington County Library
  Aurora Hills Branch
  735 18th Street South
  Alexandria, VA

  Contact:
  (703) 358-5715

  Hours:
  Monday, 10:00 a.m. to 9:00 p.m.
  Tuesday and Wednesday, 1:00 p.m. to 9:00 p.m.
  Thursday, 10:00 a.m. to 6:00 p.m.
  Friday and Saturday, 10:00 a.m. to 5:00 p.m.
  Sunday, 1:00 p.m. to 5:00 p.m.

AR108443

APPENDIX D
Glossary of Technical Terms

AR108444

Glossary of Technical Terms

Action Memorandum: The document which identifies EPA's selection of a removal action or alternative under the Superfund Accelerated Cleanup Model. The Action Memorandum is released after EPA holds a public comment period on the alternatives listed in the Engineering Evaluation/Cost Analysis document.

Administrative Record: The official file containing the investigations, studies, and other Site-related documents which provide the basis for EPA's selection of a cleanup alternative at a Superfund site.

Cleanup: An action taken to deal with a release or threatened release of hazardous substances that could adversely affect public health and/or the environment. The word "cleanup" is used to refer to both short-term (removal) actions and long-term (remedial response) actions at Superfund sites.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law (commonly known as "Superfund") passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The law gave EPA the authority to investigate sites where there is a suspected threat to public health or the environment caused by the release or potential release of hazardous substances. The law also created a special tax on the chemical and petroleum industries. Monies collected under the tax are deposited into a trust fund to be used to clean up abandoned or uncontrolled waste sites. Under the law, EPA can: pay for the site cleanup when the parties responsible for contamination cannot be located or are unwilling or unable to perform the cleanup, or take legal action to force parties responsible for site contamination to clean up the site or pay back the federal government for the cost of the cleanup.

CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System): EPA's comprehensive database and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS contains the official inventory of CERCLA Sites and supports EPA's site planning and tracking functions.

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Engineering Evaluation/Cost Analysis (EE/CA): A n evaluation and analysis conducted under the Superfund Accelerated Cleanup Model to look at alternative technologies available to address contamination at a Superfund site.

Extent of Contamination Study (ECS): A study which identifies the type and amount of contamination at a Superfund Site and includes a description and summary of the data collected from the study.

Groundwater: Fresh water that fills in gaps between soil, sand, and gravel that is underground. Groundwater can be a major source of drinking water.

Information Repository: A collection of documents about a specific Superfund site and the general Superfund process. EPA usually sets up the information repository in a public building that is conveniently located, accessible to the handicapped, and contains a photocopying machine.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The federal regulation that guides the Superfund program. The NCP was revised in 1990.

National Priorities List (NPL): EPA's list of the nation's most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup using Superfund money. EPA updates the NPL at least once a year.

Public Comment Period: A period during which the public can formally review and comment on various documents and EPA actions. For example, EPA holds a public comment period when it proposes to add sites to the National Priorities List. EPA also holds a minimum 30-day public comment period to enable community members to review and comment on a Proposed Plan.

Removal Action: An immediate, short-term cleanup action to address a release or threatened release of hazardous substances. This action is initiated to reduce or eliminate an immediate threat to public health and/or the environment.

Responsiveness Summary: A summary of oral and written comments (and EPA responses to those comments) which EPA receives during the public comment period. The Responsiveness Summary is part of the Record of Decision.

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Superfund: The program operated under the legislative authority of the CERCLA and SARA to update and improve environmental laws. The program has the authority to respond to releases or threatened releases of hazardous substances that may endanger public health, welfare, or the environment. The "Superfund" is a trust fund that finances cleanup actions at hazardous waste sites.

Superfund Accelerated Cleanup Model (SACM): A streamlined process developed by EPA to make Superfund site cleanups more timely and efficient. The SACM combines early actions, to address threats to human health and the environment, with ongoing studies of contamination to plan long-term cleanup actions at a Superfund site.

Superfund Amendments and Reauthorization Act (SARA): Modifications to CERCLA enacted on October 17, 1986.

Surface Water: Ponds, lakes, rivers, and other bodies of water naturally open to the atmosphere.

Technical Assistance Grant (TAG): An EPA grant of up to $50,000 which can be awarded to a bona fide citizens group in a Superfund site area. The grant enables that group to hire a technical expert to review and interpret site reports issued by EPA or other parties.

APPENDIX E
Technical Assistance Grant Information

Technical Assistance Grant Information

EPA provides Technical Assistance Grants (TAGs) of up to $50,000 as part of its Superfund community relations program. The Technical Assistance Grant program enables citizens in a site area to hire a technical expert to review and interpret Site reports generated by EPA or other parties. Complete information on Technical Assistance Grants is contained in an EPA document titled *The Citizens' Guidance Manual for the Technical Assistance Grant Program.* This document is available at the local information repository designated in Appendix C of this Community Relations Plan. For additional information on how to apply for a Technical Assistance Grant, contact:

Lisa Brown (3HW43)
Community Involvement Coordinator
U. S. EPA Region III
841 Chestnut Building
Philadelphia, PA 19107
(800) 553-2509 or (215) 566-5528

EPA accepts applications for Technical Assistance Grants as mandated by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act. Only one group per site can receive a Technical Assistance Grant, so EPA urges local groups to join together to apply.

The following are Federal publications on the Technical Assistance Grant program which can be obtained by calling EPA's publications number: (800) 553-6847.

- Resource Distribution for the Technical Assistance Grant Program
  Order No. PB90-249459/CCE

- Superfund Technical Assistance Grant Brochure
  Order No. PB90-273772/CCE

- Superfund Technical Assistance Grant Handbook
  Order No. PB91-238592/CCE

- Update: Superfund Technical Assistance Grants
  Order No. PB90-273715/CCE

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APPENDIX F
Sample Fact Sheets

U.S. ENVIRONMENTAL PROTECTION AGENCY

EXTENT OF CONTAMINATION STUDY FACT SHEET FOR THE POTOMAC YARD SITE

(ALEXANDRIA AND ARLINGTON, VA)

November 1995

SAMPLE COLLECTION:

July 1992
RF&P Railroad Company (RF&P) collects samples in the A-1 area of the Site. This A-1 area encompasses the area of the Site between South Glebe Road to the north and the Monroe Street Bridge to the south. Approximately 305 soil, 41 ground water, 26 sediment and 26 surface water samples are taken.

June 1993
EPA and RF&P collect background soil samples near the Site for use in the extent of contamination and risk assessment studies.

March 1994
RF&P collects samples from the North Tail, South Tail, Potomac Greens and A-1 areas of the Site. Approximately 108 soil, 36 ground water, 18 sediment and 23 surface water samples are taken.

November 1994
RF&P collects additional samples at the Site based upon comments on the work plan addendum from EPA and participating agencies. Approximately 33 soil, 6 groundwater, 9 sediment and 16 surface water samples are taken.

ECS REPORT:

February 1995
RF&P submits the first draft of the ECS report. The ECS report was reviewed and commented on by EPA, NOAA, Virginia Department of Environmental Quality (VDEQ), City of Alexandria and Arlington County.

May 1995/June 1995
RF&P submits the revised ECS report. Conditional approval of the ECS report is granted. Approval of the ECS was conditional upon development and submission of a supplemental document to the ECS report. This supplemental document contains additional background information, data, reports, and documentation. The supplemental document also presents information on future use of deep groundwater located at the Site as well as several minor modifications to the ECS report based upon comments from the EPA and other participating agencies.

September 1995
Final EPA approval of the ECS report is granted.

ECS RESULTS:

The ECS (Extent of Contamination Study) report includes a description of the Site and Site history, a summary of previous investigations and clean up actions, a description of data collection strategy and methods, a summary of data results, a discussion of data quality, and all chemical concentration data collected during the ECS.

Pertinent observations made in the ECS report include the following:

Metals

Metals have been detected in a layer of cinder ballast (coal ash) which was placed over large portions of the rail yard. Metals were also found in native soil and soil-fill at the Site, and in fly ash and Four Mile Run dredge spoils present on the Potomac Greens portion of the Site.

The three main metals of concern detected are arsenic, lead and copper. Studies conducted at the Site and elsewhere indicate that the metals which occur naturally in coal combustion by-products, such as fly ash and cinder ballast found at the Site are chemically bound in the ash/ballast and do not readily leach out.

Metals have also been detected in ground water, surface water and sediments at the Site. Some migration of metals from the Site is occurring through movement of sediments and, to a lesser degree, movement of dissolved-phase metals in stormwater runoff.

Polycyclic Aromatic Hydrocarbons (PAHs)

PAHs have been found in cinder ballast in the rail yard and in fly ash and dredge spoils on Potomac Greens. PAHs are found in coal as well as coal-combustion by-products. They are also found in petroleum hydrocarbons, such as diesel fuel. The PAH with the highest mean concentration in rail yard cinder ballast is pyrene at 1,675 parts per billion (ppb). The mean concentration of pyrene in rail yard soils is 363 ppb.

To the extent PAHs are found in native soil/fill, they are in areas where ballast has been mixed into the soils or where petroleum hydrocarbons have been detected. Migration of PAHs in ground water and surface water/sediments also appears to be associated with petroleum hydrocarbons, although movement of cinder ballast as sediment in stormwater runoff may also be occurring.

The PAH most frequently detected in site sediments is fluoranthene, detected in 77 percent of samples collected (23 of 30) at a site-wide mean concentration of 2,528 ppb. Fluoranthene was also the PAH with highest detected concentration in Site surface water at 82 ppb. PAHs were detected infrequently in Site surface water, with most detected only in a drainage ditch that formerly drained a retention pond on Potomac Greens (North Pond drainage ditch). Petroleum sheens are present periodically in this ditch, which receives stormwater runoff originating off site.

Polychlorinated biphenyls (PCBs)

PCBs have been detected in soils at the Site in low concentrations (less than 1.0 mg/kg), except in one sample, where PCBs were detected at 1.05 mg/kg). PCBs are present in some of the free product (diesel fuel and oil) found in the Central Operations area of the Site at concentra-tions $\leq$ 10.2 ppm but have not been found to be migrating at detectable levels in ground water or surface water. Limited migration of PCBs in sediment appears to be occurring along a drainage ditch that received discharge from a former oil/water separator.

Pesticides

Some pesticides that may have been used at the Site for termite control, e.g., chlor-dane or other pest control purposes have been detected sporadically throughout the Site. The most frequently detected pesticide is DDT and associated breakdown products (DDD and DDE).

Migration of pesticides is not occurring through ground water, but some migration of DDT and other pesticides appears to be occurring via sediment in surface water runoff. The pesticide detected most frequently in Site sediments was beta-BHC.

Pesticides detected in surface waters in drainage ditches on Potomac Greens have been found in Site soils and in stormwater coming onto the Site via stormwater sewer pipes originating off site. These are commonly detected pesticides. The pesticide detected most frequently in surface water samples was endosulfan sulfate, at a maximum concentration of 0.33 ppb.

Volatile Organic Compounds (VOCs)

VOCs, principally solvents, have been detected sporadically in soils across the Site, primarily in the Central Operations Area and the North Yard. VOCs were also detected sporadically in groundwater.

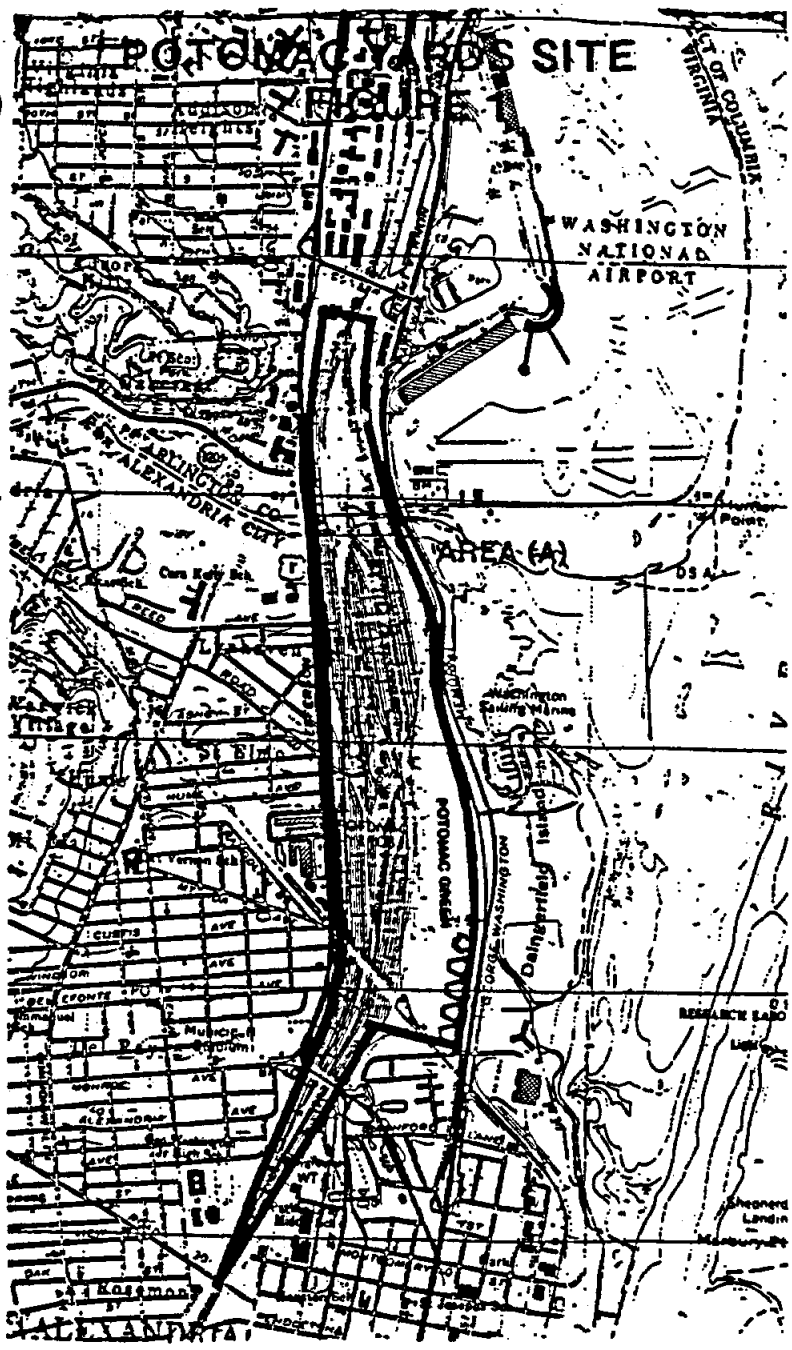
Trichloroethylene (TCE) has been detected in three ground water monitoring wells in the Central Operations Area at a maximum concentration of 3,400 ppb. TCE appears to be migrating downward through the uppermost aquifer along a portion of the eastern edge of the Central Operations Area, but was not detected in the lower aquifer. TCE was also detected in stormwater runoff and sediments in a drainage area in the North Yard area of the Site, which discharges to Four-Mile Run. Soil

within this drainage area contained the highest concentration of TCE detected in site soils (3,510 ppb).

tal Petroleum Hydrocarbons (TPH)

The extent of free product (diesel fuel and oil) was confirmed in the ECS as being limited to the Refueling Area within the Central Operations Area of the Site. Recovery of the free product began in 1991 and continues under VDEQ oversight. Two additional small free product areas were also identified during the ECS. Recovery of the free product from these two areas is also underway.

Table 1-1 (see next page) provides a summary of the ECS findings as well as Site average concentrations for potential chemicals of concern at the Site.



ADDITIONAL INFORMATION:

Administrative Record Locations:

The James M. Duncan, Jr. Library -
2501 Commonwealth Ave.
Alexandria, VA
(703) 838-4566

- Barrett (Queen Street) Branch Library -
717 Queen St.
Alexandria, VA
(703) 370-6050

- Aurora Hills Library -
735 18th Street South
Arlington, VA
(703) 358-5715

EPA Contact People:

- Jeff Dodd (3HW32)
U.S. EPA Project Manager
401 Methodist Building
Wheeling, WV 26003
(304) 234-0254

- Lisa Brown (3EA30)
U.S. EPA Community Involvement Coordinator
841 Chestnut Building
Philadelphia, PA 19107
(800) 553-2509 or (215) 597-2129

U.S. ENVIRONMENTAL PROTECTION AGENCY

BASELINE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT FACT SHEET FOR THE POTOMAC YARD SITE

(ALEXANDRIA AND ARLINGTON, VA)

NOVEMBER 1995

WHAT IS A RISK ASSESSMENT?

The purpose of a risk assessment is to evaluate the risks to human health and the environment associated with potential exposures to chemicals identified at a Site. A risk assessment is a scientific evaluation of the toxic properties of site contamination. It outlines the ways people and the environment could be exposed to the contaminants and determines the likelihood that exposed humans and ecological receptors could be adversely affected by the contamination. The Risk Assessment also characterizes the effects that site contamination may cause.

BACKGROUND:

The Baseline Human Health and On-site Ecological Risk Assessment (BHERA) is based upon the findings and data collected for the Extent of Contamination Study (ECS) conducted by RF&P Railroad Company (RF&P). The ECS report and data were approved by the EPA in September 1995.

The draft BHERA was developed by RF&P and submitted to EPA in June 1995. The BHERA was reviewed and/or commented upon by EPA, NOAA, VDEQ, City of Alexandria and Arlington County. The revised BHERA was submitted in August 1995. Concerns over the ecological portion of the BHERA were raised in the revised document by EPA and NOAA. The ecological portion of the BHERA was re-revised to address EPA and NOAA's concerns. The BHERA was approved by EPA in October 1995.

HUMAN HEALTH RISK ASSESSMENT:

The Human Health Risk Assessment was developed by RF&P in accordance with EPA Region III guidance documents. The primary objective of the Human Health Risk Assessment was to evaluate potential risks associated with exposure to chemicals at the Potomac Yard Site or released from the Site as a result of anticipated development activities. Chemicals of potential concern were selected for each of six Site areas that are considered to be distinctive because of past rail yard activities and anticipated development plans. These areas of the Site include the North Tail, North Yard, Central Operations, South Yard/South Tail, Slaters Lane, and Potomac Greens.

An analysis of potential exposure pathways was conducted for each of the six Site areas under current, interim, and future land-use scenarios. The most important receptors were found to be current trespassers and construction workers, on-site and off-site residents, utility workers, landscape workers, and commercial workers for interim and future land-use pathways. Inhalation of chemicals present in on-site soil and incidental ingestion of soil were found to be the most important routes of exposure for evaluation.

The pertinent findings of the Human Health Risk Assessment are as follows:

- Under current land use conditions, potential exposures were associated with incidental ingestion of soil by a trespasser in the South Yard/South Tail area.
- During interim use, the highest potential exposures were to construction workers from the inhalation and ingestion of dust generated during development-related activities.

AR108454

• Under future use conditions, the highest exposures were also industrial in nature, and were associated with inhalation and ingestion of dust by a construction worker, and inhalation of petroleum hydrocarbons by a utility trench worker in a localized site area where diesel free product is being recovered. Estimated airborne chemical concentrations compatible for comparison with existing occupational standards and criteria did not exceed these limits in any scenario.

• There is little potential for exposure and a low risk to residents who could occupy the Site in the future due to future development plans for the Site in which a majority of the Site will be paved and/or landscaped.

• The baseline human health risk assessment concluded that the Site does not pose unacceptable risks to human health. All of the upperbound excess cancer risks were within or below EPA's risk range (10^{-4} to 10^{-6}) for risk management at Superfund Sites. The hazard indices for noncancer health effects were predominately below EPA's guideline threshold of 1. The hazard index for high-end occupational exposure was slightly exceeded in only one localized area of the Site. However, all of the estimated air concentrations associated with this exposure were far below occupational standards and criteria.

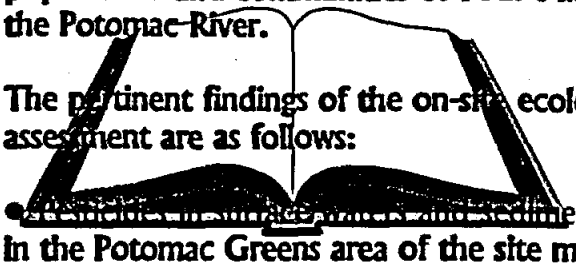
• The primary chemical associated with the human health risks was arsenic, associated with cinder ballast.

ECOLOGICAL RISK ASSESSMENT:

The on-site ecological risk assessment used a screening level approach in accordance with EPA Region III guidance. Under this approach, estimated exposure concentrations were compared to screening-level toxicity values, such as ambient water quality criteria. Estimated exposures that exceeded the screening toxicity values indicate potential risk to ecological receptors.

The objective of the On-Site Ecological Risk Assessment was to determine if chemicals associated with the Site have the potential to affect the structure, function, or interactions of biological populations and communities within the study area.

The overall focus of the Ecological Risk Assessment was on potential site-related impacts on the aquatic populations and communities of Four Mile Run and the Potomac River.



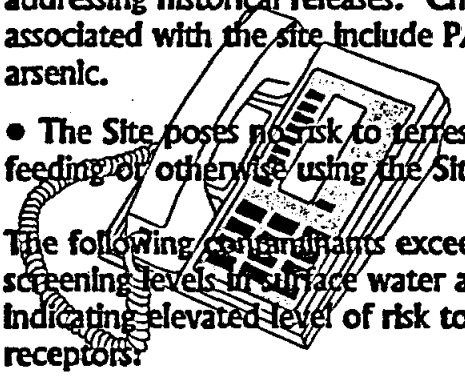
The pertinent findings of the on-site ecological risk assessment are as follows:

• Pesticides in surface waters and sediments in the Potomac Greens area of the site may cause a localized reduction in the abundance and diversity of aquatic insects.

• Potomac Yards is a source of low concentrations of PAHs, metals and pesticides to Four Mile Run and the Potomac River.

• Measured concentrations of some contaminants at the property boundary exceed toxicity criteria for sensitive species of aquatic life, possibly resulting in localized decreases in benthic species abundance and diversity.

• The available sampling data cannot be used to evaluate ecological risks associated with historical releases from the Site primarily to the Potomac River and Four Mile Run. Chemical concentrations in sediments are the most relevant data for addressing historical releases. Chemicals potentially associated with the site include PAHs, PCBs and arsenic.



• The Site poses no risk to terrestrial wildlife feeding or otherwise using the Site.

The following contaminants exceeded toxicity screening levels in surface water at the Site indicating elevated level of risk to ecological receptors:

Four Mile Run Storm Water/Drainage Ditches: Aluminum, arsenic, lead, and zinc.

Potomac River Drainage Ditches: Beta-chlordane, endosulfan sulfate, heptachlor, and zinc.

Potomac Greens Drainage Ditches: Beta-chlordane, endosulfan sulfate, heptachlor epoxide and zinc.

• The following contaminants exceeded toxicity screening levels in sediments at the Site indicating elevated level of risk to ecological receptors:

Four Mile Run Storm Water/Drainage Ditches: endrin ketone, dibenz(a,h)anthracene, fluorene, and copper.

Potomac River Drainage Ditches: Anthracene, benzo(a)anthracene, fluorene, arsenic, copper, lead, and mercury.

Potomac Greens Drainage Ditches: Beta-chlordane, drin ketone, anthracene, benzo(a)anthracene, fluorene, arsenic, copper, lead, and mercury.

ADDITIONAL INFORMATION:

Administrative Record Locations:

- The James M. Duncan, Jr. Library -
  2501 Commonwealth Ave.
  Alexandria, VA
  (703) 838-4566

- Barrett (Queen Street) Branch Library -
  717 Queen St.
  Alexandria, VA
  (703) 370-6050

- Aurora Hills Library -
  735 18th Street South
  Arlington, VA
  (703) 358-5715

EPA Contact People:

- Jeffrey Dodd (3HW32)
  U.S. EPA Project Manager
  401 Methodist Building
  Wheeling, WV 26003
  (304) 234-0254

- Lisa Brown (3EA30)
  U.S. EPA Community Involvement Coordinator
  841 Chestnut Building
  Philadelphia, PA 19107
  (800) 553-2509 or (215) 597-2129

U.S. Environmental Protection Agency
Engineering Evaluation/Cost Analysis (EE/CA) Fact Sheet for the Potomac Yard Site
(Alexandria and Arlington, VA)

November 1995

Why do an EE/CA?

The main function of an EE/CA is to provide a framework for evaluating and selecting alternative cleanup technologies. An EE/CA is an analysis of cleanup alternatives for a site. An EE/CA evaluates cleanup options in order to determine which cleanup alternatives would work best with the site's specific conditions, contaminants, and risks posed.

EE/CA PROCESS:

/CA Approval Action Memorandum

The EE/CA approval memorandum is prepared once the need for a non-time critical removal action has been determined. The EE/CA memorandum enables many things. It secures management approval and oversight funding approval to conduct the EE/CA; documents that the situation meets the National Contingency Plan (NCP) criteria for initiating a removal action and that the required action is non-time critical; and provides a finding of endangerment to human health or the environment.

The EE/CA approval memorandum also describes the site's condition and provides background information on the site. In addition, this document describes the threats to public health or welfare and/or the environment. A summary of enforcement actions, a description of the proposed EE/CA project, d an outline of oversight costs are also cluded in the EE/CA memorandum.

Based upon the results of the Extent of Contamination Study (ECS) and Baseline Human Health and On-Site Ecological Risk Assessment (BHERA) conducted at the Potomac Yard Site, EPA determined that further removal actions are appropriate at the Site and that an engineering evaluation/cost analysis ("EE/CA") needs to be done.

An EE/CA approval memorandum was prepared and approved by the Director for EPA Region III's Hazardous Waste Management Division on October 6, 1995. A copy of the EE/CA approval memorandum for the Potomac Yard Site is attached.

The proposed project description for the Potomac Yard Site EE/CA includes the following:

1. Evaluate, propose and review alternatives to mitigate the release of contaminants from the Site which may be potentially affecting the ecological receptors in the Potomac River, Four Mile Run and Potomac Greens areas of the Site.

Factors to be considered in the evaluation, proposal and review of alternatives to mitigate the release of contaminants at the Site which may be potentially affecting the ecological receptors in the Potomac River, Four Mile Run and Potomac Greens areas of the Site should include, but not necessarily be limited to the following:

- Mitigating the release of contaminants to EPA approved limits, including, but not limited to Ambient Water Quality Criteria, or other criteria protective of ecological receptors in surface water and sediments from the Site.
- Establishing a quarterly monitoring program for contaminants at all discharge points to the Potomac River and Four Mile Run to evaluate the effectiveness of the

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measure(s) selected and approved by the EPA to mitigate the release of contaminants to Four Mile Run, the Potomac River and Potomac Greens.

- Conducting groundwater quality sampling downgradient of the Central Operations area of the Site to monitor for potential migration of contaminants present in this area of the Site.
- Evaluating the nature and extent of contamination in sediments from the Potomac River and Four Mile Run to evaluate ecological risks associated with current and historical releases from the Site.

2. Develop and submit an "off-site ecological risk assessment" based upon the additional data collected from Four Mile Run and the Potomac River sediment sampling as well as data collected as part of the Extent of Contamination Study already completed at the Site.

EE/CA Document

The EE/CA for the Potomac Yard Site is being developed by RF&P Railroad Company (RF&P) pursuant to a Consent Order between EPA and RF&P Corporation. A draft copy of the EE/CA will be submitted to EPA and other participating agencies' for review and comment. Note: EPA will ultimately select the removal action alternative after the public comment period on the EE/CA. The EE/CA will address the following topics:

- Executive Summary
- Site Characterization
- Identification of Removal Action Objectives
- Identification and Analysis of Removal Action Alternatives
- Comparative Analysis of Removal Action Alternatives
- Recommended Removal Action Alternative

Public Comment Period

Once the EE/CA has been resubmitted and revised according to comments from EPA and other participating agencies, the EE/CA will be made available for public review and comment. Copies of the EE/CA will be put in the established Administrative Records for the Potomac Yard Site. A notice of public availability and request for comments will appear in local newspapers. A public comment period of at least 30 days is required by the National Contingency Plan (NCP), a document which mandates EPA's actions.

Response to Comments

EPA will respond to comments received during the comment period. EPA will modify recommended/selected removal action alternatives as necessary.

Removal Action Alternative Selection

The selected removal action alternative will be documented in an action memorandum, similar to the EE/CA approval memorandum. The main purpose of the action memorandum is to select the removal action alternative for the Site, obtain management approval and funding to conduct the removal action (if no agreement can be reached with potentially responsible parties to conduct the removal action alternative).

Removal Action Implementation

Once the removal action alternative for the Site has been selected, EPA will seek to negotiate a Consent Order with potentially responsible parties (PRPs) to implement the selected removal action alternative.

ADDITIONAL INFORMATION:

Administrative Record Locations:

The James M. Duncan, Jr. Library, 2501 Commonwealth Ave., Alexandria (703)838-4566

Barrett Branch Library, 717 Queen St., Alexandria, VA (703) 370-6050

Aurora Hills Library, 735 18th Street South, Arlington, VA (703) 358-5715

EPA Contact People:

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